

Serial No.: 10/674,220
Examiner: Andrew W. Chriss

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed January 22, 2009 and the Advisory Action mailed April 1, 2009. At the time of this January 22, 2009 Office Action, Claims 1-20 were pending. The Applicant respectfully requests reconsideration and favorable action in this case.

The January 22, 2009 Office Action raised the following issues: (I) Claims 1-20 were rejected under 35 U.S.C. § 112(2) and (II) Claims 1-20 were rejected under 35 U.S.C. § 103(a).

I. Rejection of Claims 1-20 Under 35 U.S.C. § 112(2)

Examiner issued the 35 U.S.C. §112(2) rejection, stating that the claims are indefinite for failing to particularly point out and distinctly claim subject matter the applicant regards as the invention. Specifically, the Examiner rejects the language “the packet comprises a route indicator field including a link type field” in independent claim 1. However, the Examiner suggests that this could be amended to state “the packet comprises a route indicator field further comprising bytes that indicate a link type” or the equivalent to overcome this rejection. Applicant has amended independent claim 1 accordingly to include “a route indicator field further comprising at least one bit that indicates a link type” to overcome this rejection.

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II. Rejection of Claims 1-20 Under 35 U.S.C. § 103(a)

The Examiner rejected Claim 1 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,061,876 ("Ambe") in view of United States Patent Application No. 2003/0223358 ("Rigby") and further in view of U.S. Patent Publication No. 2001/0048660 ("Saleh").

Claim 1 distinguishes over the Ambe, Rigby and Saleh references because it claims "receiving a packet, wherein the packet comprises a route indicator field further comprising at least one bit that indicates a link type" and "responsive to the packet being received after a time of failure along a communication link between two of a plurality of nodes and in response to the route indicator field, transmitting the packet along a second route in the system to another node in the plurality of the nodes"-features not disclosed in any cited reference.

In describing these limitations involving a route indicator field, the application states in relevant part:

Figure 2 illustrates a packet format 20 according to a preferred embodiment and for use in connection with system 10 of Figure 1a. Packet format 20 includes various fields as known in the Ethernet art, and only some of which are shown by way of example. These fields include a source address field 20₁, a destination address field 20₂, a length field 20₃ and a data payload field 20₄. Other fields, although not shown, may be included as also known in the art, such as a preamble and a packet (or frame) start field. According to the preferred embodiment, however, packet format 20

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includes an additional field 20₅, referred to hereafter as a link type field 20₅. Link type field 20₅ is so named because, as shown below, the state of the field indicates the type of link on to which the packet is routed, with one state in field 20₅ (e.g., 0) indicating a spanning tree link and another state in field 20₅ (e.g., 1) indicating a bypass link along system 10. In the preferred embodiment, link type field 20₅ is a one-bit field and it is contemplated that it could be a bit provided as an addition to existing Ethernet frames or, alternatively, it could be a bit that is already in the Ethernet frame yet where the function of that bit is changed to be consistent with the functionality described in this document as relating to link type field 20₅.

See Patent Application, p. 9. The Application further states:

When a failure occurs in a link in system 10, that failure is detected according to known protocols. However, as an enhancement in a preferred embodiment, in response to the failure detection, a node within system 10 changes the state of link type field 20₅ so that each packet so changed will be routed along a bypass link, where recall by way of example that a binary value of 1 in link type field 20₅ causes this effect. Further, when a node within system 10 receives a packet with a binary value of 1 in its link type field 20₅, the receiving node does not consult its forwarding table for purposes of further routing the received packet, but instead it consults its bypass table to determine the next route for the received packet.

See Patent Application, p. 11. The route indicator field is further defined by Applicant as follows:

In system 10, the route indicator field is a link type field 20₅, operable to indicate that the packet is to continue along a spanning tree route or a bypass route. In system 10', the route indicator field is a link set field 20'₃, operable to indicate that the packet is to continue along a first set of links forming a first route, a second set of links forming a second route, and so forth for up to 2^M sets of links corresponding to a respective number of 2^M routes.

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See Patent Application, p. 26. Examiner cites Saleh as disclosing a “failed path field” that is equivalent in structure and function to Applicant’s link type field (after amendment “at least one bit that indicates a link type”). (See Saleh, paragraph 0054 and FIG. 3D, 385)

FIG. 3D of Saleh shows a 16 bit failed path field 385 as part of a Restore_I packet. The cited paragraph of Saleh discloses, “[t]he failed path field (385) indicates whether the path is the Primary or Secondary path for CoS-3. For all other types of VPs, this field indicates that failed path is the primary path for failed VP.”

The structure and use of this “failed path field” is not the equivalent of changing the state of the route indicator field by changing the value of the at least one bit that indicates a link type in a packet. There is no automatic change of state of the at least one bit that indicates link type in a packet disclosed in Saleh. Instead a separate Restore_I packet is sent which contains the “failed path field” along with other fields. Hence, Saleh does not disclose “in response to the route indicator field, transmitting the packet along a second route in the system to another node in the plurality of nodes, wherein the second route differs from the first route and is identified prior to the time of failure.”

Applicant respectfully requests the Examiner withdraw the rejection and allow pending amended Claim 1. In addition, all claims depending from amended Claim 1 either directly or indirectly, including Claims 2-20, are also allowable for the reasons discussed in conjunction with amended Claim 1.

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CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims. If there are any matters that can be discussed by telephone to further the prosecution of this Application, Applicant invites the Examiner to contact the undersigned attorney at 512-306-8533 at the Examiner's convenience.

Respectfully submitted,

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